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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/880,834	06/15/2001	David A. Dalman	358362001101	7037

7590

05-07-2002

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EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

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DATE MAILED: 05/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/880,834

Applicant(s)

DALMAN ET AL.

Examiner

Elizabeth M Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 23 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's election without traverse of Group I in Paper No. 4 is acknowledged.
2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
3. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over at least claim 1 of U.S. Patent No. 5,196,259. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to articles of manufacture comprising PBO fibers.
4. Claims 1-15 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over at least claim 1 of U.S. Patent No. 5,233,821. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to articles of manufacture comprising PBO fibers.
5. Claims 13 and 15 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13 and 15 are duplicates of each other.

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

7. Claims 1-8 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolfe. Wolfe discloses using PBO fiber yarns in ballistic protection fabrics (Page 633). Claims 1, 8 and 16 are therefore anticipated by Wolfe. Wolfe discloses PBO polymers comprising the claimed mer units (pages 602, 605, 607 and 633). Therefore, claims 2-7 are anticipated by Wolfe.

8. Claims 1-10, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Weber et al, U.S. Patent No. 5,233,821. Weber et al disclose fabrics containing polybenzazole fibers. Claims 1, 13 and 15 are therefore anticipated.

The PBO polymers disclosed by Weber et al contain the claimed mer units, (col. 2, line 18 et seq). Claims 2-7 are therefore anticipated by Weber et al.

The fibers are usually collected into yarns prior to making a fabric, (col. 5, lines 9-10__
Claim 8 is therefore anticipated by Weber et al.

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The benzazole polymer fibers may be combined with a cotton, polyester, nylon or rayon fibers, (col. 6, lines 18-20). Therefore claims 9 and 10 are anticipated by Weber.

Weber et al teach a vest made from the PBO fabric, (claims 13 and 15). Therefore, these claims are anticipated.

9. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Pierini et al, U.S. Patent no. 5,196,259.

Pierini et al discloses a composite comprising polybenzoxazole fibers and a matrix resin. Known PBO polymers used for manufacturing fibers contain the claimed mer units. Pierini et al disclose fibers tows. The composite of Pierini et al may contain a mixture of PBO fiber and non PBO fiber, (see col. 7, lines 21-22). Pierini et al disclose composites comprising several layers of fibers, (see col. 5, lines 7-9). Pierini et al discloses that the composites are useful for structural materials and parts (see col. 2, lines 20-22). Pierini et al discloses the fibers in the form of a cloth or a non-woven mat. The matrix resin may be a PBO or PBT polymer. The use of such a material as a matrix would produce a rigid composite panel. Pierini et al discloses a cloth made from the fibers. The PBO fiber preferably have a tensile strength of at least 2.5 GPA (col. 2, lines 34-35).

10. Claims 1-8, 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Pepin, U.S. Patent No. 5,102,723. Pepin discloses an energy absorbing panel comprising a plurality of layers of energy absorbing material. The energy absorbing material may be several layers of woven fabric, (col. 3, lines 11-13). Suitable fibers include PBO fibers (col. 3, lines 15-16). Known PBO

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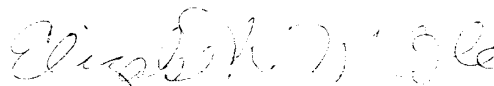
polymers used for manufacturing fibers contain the claimed mer units. Claims 2-7 are therefore anticipated by Pepin. Woven fabrics generally comprise yarns. Pepin discloses that the panel is useful for vehicular armor and battlefield electronic shelter. See col. 2, line 20 35 seq.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c
May 2, 2002